(54) Title: A COMMUNICATION NETWORK, A NETWORK ELEMENT AND COMMUNICATION PROTOCOL AND METHOD OF ADDRESS AUTO-CONFIGURATION THEREFOR
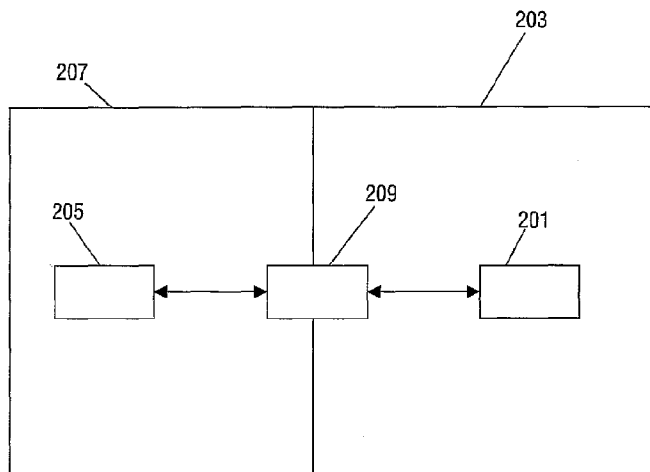
(57) Abstract: The invention relates to a system for address auto-configuration for a first network element (201), being part of a first network (203) connected to a second network (207) through a gateway element (209). The first network element transmits an address inquiry message to a second network element (205) requesting an address of the gateway element (209). The second network element (205) in response transmits an address response message comprising a gateway address of the gateway element (209). Upon receiving the address response message, the first network element generates a first address in response to the gateway address. The gateway element (209) may specifically be an IPv4 home router for a private home network and the first network element (201) may be a combined IPv6/IPv4 network element. The first network element (201) may be provided with the public IPv4 address of the private home network from the second network element (205) thereby enabling it to generate an IPv6 address from the public IPv4 address.